CLAIMS

What is claimed is:

1. A reciprocating saw, comprising:

a motor housing for containing a motor, said motor housing including a first end and a second end;

a linkage disposed in the motor housing, said linkage for linearly reciprocating a straight cutting blade extending generally from the first end of the motor housing;

a handle member pivotally coupled to said second end for rotation substantially about a main axis of said motor housing; and

a securing mechanism for locking the rotational position of the handle member,

wherein the handle member and the securing mechanism are configured to lock the handle member in at least one predefined rotational orientation with respect to said motor housing.

2. The reciprocating saw of claim 1, wherein the handle member and said motor housing are coupled via a rib and a groove disposed about the peripheral portions of the interface between the handle member and said motor housing.

3. The reciprocating saw of claim 1, wherein the handle member is formed of a pair of shell portions including at least one of a rib and a groove for coupling with a complimentary structure included on said motor housing.

4. The reciprocating saw of claim 1, wherein the securing mechanism is a biased latch for engaging a catch included on said motor housing.

5. The reciprocating saw of claim 4, wherein said motor housing includes a generally annular rib having recessed portions at predefined orientations for locking by the latch.

6. The reciprocating saw of claim 5, wherein recessed portions of the rib are located at approximately 0° (zero degrees), 90° (ninety degrees) and 180° (one hundred eighty degrees) in a first direction, and 90° (ninety degrees) in a second direction.

7. The reciprocating saw of claim 1, wherein the handle member is pivotable between 180° (one hundred eighty degrees) in a first direction, and 90° (ninety degrees) in a second direction.

8. The reciprocating saw of claim 1, wherein the handle member is generally D-shaped.

9. The reciprocating saw of claim 1, further comprising a switch mounted to the handle member for controlling the flow of electricity to the motor.

10. The reciprocating saw of claim 9, wherein the switch is a bar switch extending along an interior end portion of a D-shaped handle member.

11. The reciprocating saw of claim 1, further comprising a stop connected to at least one of the handle member and said motor housing, said stop for preventing full rotation of the handle member.

12. The reciprocating saw of claim 1, wherein the handle member and said motor housing are connected via a center hub.

13. A reciprocating saw, comprising:

a motor housing for containing a motor, said motor housing including a first end and a second end;

a linkage disposed in the motor housing, said linkage for linearly reciprocating a straight cutting blade extending generally from the first end of the motor housing;

a connector mounted to the second end, said connector including a generally annularly ribbed end, substantially opposite the motor housing;

a handle member pivotally coupled to said connector about said generally annularly ribbed end for rotation substantially about a main axis of said motor housing; and

a securing mechanism for locking the rotational position of the handle member,

wherein the handle member and the securing mechanism are configured to lock the handle member in at least one predefined rotational orientation with respect to said motor housing.

14. The reciprocating saw of claim 13, wherein the handle member is formed of a pair of shell portions including at least one of a rib and a groove for coupling with the generally annularly ribbed end of the connector.

15. The reciprocating saw of claim 13, wherein the securing mechanism is a biased latch for engaging a catch included on said connector.

16. The reciprocating saw of claim 15, wherein said connector's generally annular ribbed end includes recessed portions at predefined orientations for locking by the latch.

17. The reciprocating saw of claim 16, wherein recessed portions of the ribbed end are located at approximately 0° (zero degrees), 90° (ninety degrees) and 180° (one hundred eighty degrees) in a first direction, and 90° (ninety degrees) in a second direction.

18. The reciprocating saw of claim 13, wherein the handle member is generally D-shaped.

19. The reciprocating saw of claim 13, further comprising a switch mounted to the handle member for controlling the flow of electricity to the motor.

20. The reciprocating saw of claim 19, wherein the switch is a bar switch extending along an interior end portion of a D-shaped handle member.

21. The reciprocating saw of claim 13, further comprising a stop connected to at least one of the handle member and said connector, said stop for preventing full rotation of the handle member.

22. The reciprocating saw of claim 13, wherein said connector is configured to break-away from said motor housing upon application of sufficient force.

23. The reciprocating saw of claim 13, wherein the handle member and said connector are coupled about their peripheries.

24. A reciprocating saw, comprising:

a motor housing for containing a motor, said motor housing including a first end and a second end;

a linkage disposed in the motor housing, said linkage for linearly reciprocating a straight cutting blade extending generally from the first end of the motor housing;

a D-shaped handle pivotally coupled adjacent said second end for rotation substantially about a main axis of said motor housing, said handle being formed of two shell portions; and

a securing mechanism for locking the rotational position of the handle,

wherein the handle and the securing mechanism are configured to lock the handle in at least one predefined rotational orientation located at approximately 0° (zero degrees), 90° (ninety degrees) and 180° (one hundred degrees) in a first direction, and 90° (ninety degrees) in a second direction with respect to said motor housing.

25. The reciprocating saw of claim 24, wherein the securing mechanism is a biased latch for engaging a catch included on said motor housing.

26. The reciprocating saw of claim 25, wherein said motor housing includes a generally annular rib having recessed portions at predefined orientations for engagement by the latch.

27. The reciprocating saw of claim 24, further comprising a switch mounted to the handle for controlling the flow of electricity to the motor.

28. The reciprocating saw of claim 27, wherein the switch is a bar switch extending along an interior end portion of a generally D-shaped handle.

29. The reciprocating saw of claim 24, further comprising a stop connected to at least one of the handle and said motor housing, said stop for preventing full rotation of the handle.

30. The reciprocating saw of claim 24, further comprising a connector mounted to the second end, said connector having at least one generally annular rib for engaging a corresponding structure included on said handle shell portions.

31. A reciprocating saw, comprising:

a motor housing for containing a motor, said motor housing including a first end and a second end;

a linkage disposed in the motor housing, said linkage for linearly reciprocating a straight cutting blade extending generally from the first end of the motor housing;

means for pivotal grasping by a user; and

means for securing the grasping means in at least one predefined rotational orientation with respect to said motor housing.

32. The reciprocating saw of claim 31, wherein the securing means is a biased latch for engaging a catch included on said motor housing.

33. The reciprocating saw of claim 31, wherein the securing means is configured to position the grasping means at approximately 0° (zero degrees), 90° (ninety degrees) and 180° (one hundred eighty degrees) in a first direction, and 90° (ninety degrees) in a second direction.

34. The reciprocating saw of claim 31, wherein the grasping means is generally D-shaped.

35. The reciprocating saw of claim 31, further comprising a switch mounted to the grasping means for controlling the flow of electricity to the motor.

36. The reciprocating saw of claim 31, further comprising a stop configured for preventing full rotation of the handle member.